GUIDE TO GOVERNMENT OPPORTUNITES

INNOVATION EMPIRE

2024

INNOVATION EMPIRE™

Welcome!

At Future Labs, we work closely with Innovation Empire to serve the small business and entrepreneurial communities to help provide the best solutions for federal agencies. This guide presents an overview of grants and contracts available to startup companies looking to work with government agencies and resources available to streamline the lengthy process. The goal is to provide insight into the diverse government innovation ecosystem that aims to dual-use technologies needed to solve current and future problems. It will go into detail on how to register and apply for Small Business Innovation and Research (SBIR) grants. It is a living document and updates will be made as they are needed.

To learn more, visit:
www.future-laboratories.org

THIS DOCUMENT IS FOR REFERENCE ONLY

Why the Government Wants YOUR Help

The Department of Defense believes it is critical to leverage small businesses and industry minds to get the best ideas, test prototypes in the laboratory, and then eventually in the field or in hostile environments. The thought of working with the government can seem very overwhelming, but they have programs in place to facilitate small businesses to find funding and source the government with the technology they desperately need to keep a global competitive advantage. The innovations brought to the government do not need to be a 100% solution; don't hesitate to share a 70% or 80% solution to solve a warfighting challenge. Innovative technology is a large focus for the government and private sector small businesses have what it takes!

Dual Use Technology

Dual use refers to any good or technology that has significant government application and a private sector application. Essentially, they satisfy more than one goal at a time. The DoD's dual use strategy is based on three pillars: leveraging the commercial sector's technology based investment, taking advantage of commercial production to manufacture defense equipment, and the third calls for the DoD to make those investments that are needed to facilitate the use of commercial components into defense systems.[1]

[1] National Academies of Sciences, Engineering, and Medicine. 1997. International Friction and Cooperation in High-Technology Development and Trade: Papers and Proceedings. Washington, DC: The National Academies Press. https://doi.org/10.17226/5902.

1,2,3, GO!

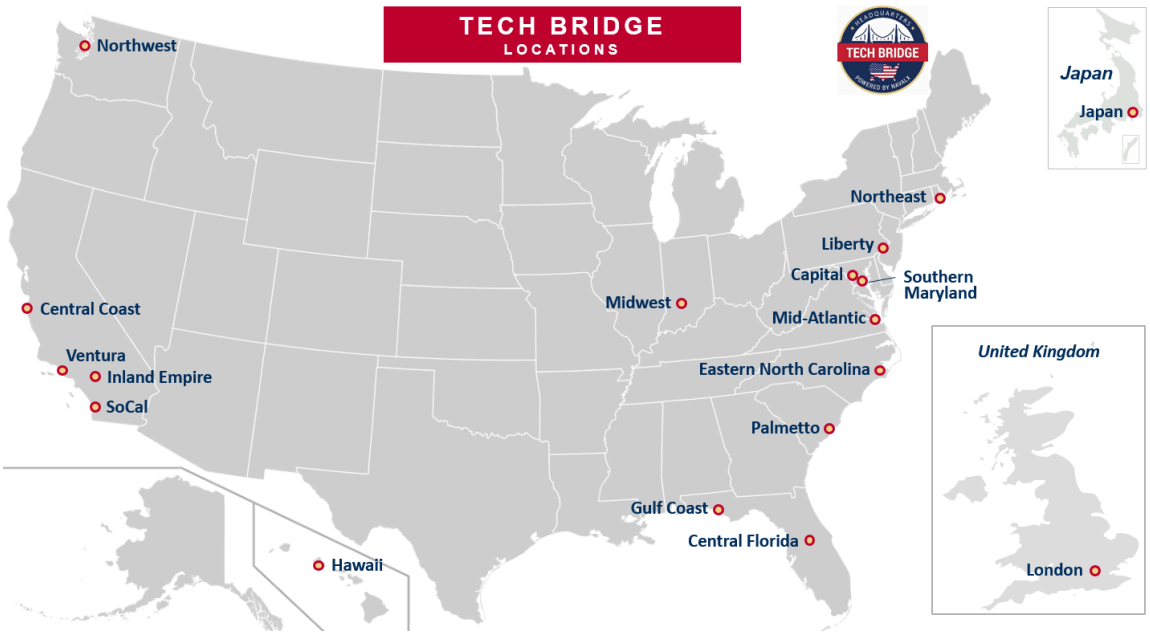
1. Prepare your business and decide if the Department of Defense is a good customer fit for your business. It is important to ensure your business is sustainable and healthy in order to scale the impact. Identify and research your potential agency and what goods and services they are looking for.
    a. Acquisition.gov and search agencies that are buying, when they are buying and what they're buying.
    b. www.sam.gov, an online listing of government contracts that detail all contracts with a value exceeding $25,000
    c. www.usaspending.gov, a site that details how government money is spent, what agency is issuing awards and who the federal government is buying from.
2. Network, make connections to give you contacts that will help grow your business. You will need to develop an elevator pitch, short and sweet to give during your networking events.
3. Start the formal competitive bid process for a contract. You will need to sell yourself.
    a. Marketing yourself with a capability statement is one way to stand out. These are written documents you include in a contract bid that state your firm's abilities in a clear, compact manner like a cover letter for a resume. Be sure to tailor your statement to match the specific agency need. A well-written statement would outline company overview, past performance, and how you can fill a need.
4. Engage stakeholders in the DoD in order to identify a technology transition plan.
5. Identify and pursue major acquisition/fielding opportunities
6. Significant recurring revenue via tech transition - YOU DID IT!

Note: There are various accelerator programs designed to reduce the transition timelines in the funding process with the government. The programs can include mentorship, custom-built educational materials, prepping for story pitches, hands on support, networking opportunities. Check with each agency, as they vary.

Reach out with any questions, **INNOVATION EMPIRE** is here to serve you.

Tech Bridges

The government WANTS to talk to you, they even set up Tech Bridges throughout the country to connect with you!



NavalX is a department of the Navy organization that helps the US Navy and Marine Corps embrace and implement a more collaborative, enterprise-wide approach to innovation. A NavalX Tech Bridge offers access to State and Local government and academic agencies creating a richer regional innovation ecosystem and further supporting economic development. Tech Bridges were developed as a way of increasing collaboration, knowledge sharing, and innovation with leading-edge tech companies and innovation partners to accelerate solutions to the warfighter. When NaxalX takes on a new effort, tech bridges act as technology scouts, networking hubs, and connection points between industry and our warfare centers and Naval Labs. There are 18 tech bridges, serving as the front door for small businesses, start-ups, and others who are interested in working with the US Navy and Marine Corps. In return, tech bridges scan the market to find and assess available technology, vendors, and solutions. We encourage solvers to connect with their regional tech bridge and join the NavalX network at USNAVALX.com to discover open opportunities, helpful resources, and new ideas.

NavalX essentially acts as an intermediary for government employees that don't know how to approach businesses and as a tech bridge service for businesses to accelerate through the onerous acquisition process. The NavalX Tech Bridges are a connected network that enhances collaboration between Naval Labs, industry, academia, and other military branches. A NavalX Tech Bridge offers a collaboration space in a commercial business space, rather than on base. An off base location offers a more easily accessible landing spot to foster a collaboration ecosystem to build productive partnerships and accelerate delivery of dual use solutions to the warfighter.

What type of funding are you interested in?

Grants	**Contracts**
A flexible instrument designed to provide funds to support a public purpose	A binding agreement between a buyer and a seller for goods or services
Principal Investigator has more freedom in defining scope of work	Scope of work is fairly inflexible
Flexible with respect to budget and often uses a “drawdown” system	Payments are based on deliverables and milestones
Cannot be used for classified work	Must be used for classified work
Requires best efforts in research	Requires delivery of promised goods and services determined by contract type
Easy to amend or revise	Modification must meet strict standards
Questions and answers about solicitation are not made public	Questions and answer about solicitations must be made public
Application defines the scope of work	Government defines the scope of work

Source: https://www.sbir.gov/tutorials

Funding Agencies

What type of agency are you looking to find funding from?

	Grants	Contracts
Department of Energy	X	
National Oceanic and Atmospheric Administration	X	
National Science Foundation	X	
U.S. Department of Agriculture	X	
Department of Health and Human Services	X	X
Department of Defense		X
National Aeronautics and Space Administration		X
Homeland Security		X
Department of Transportation		X
Environmental Protection Agency		X
Department of Education	X	X

Source: https://www.sbir.gov/tutorials/program-basics/tutorial-6

Grants

Grant Requirements

Organizations must register with SAM.gov and Grants.gov.

As of April 2022, the federal government streamlined the registration process and entities doing business with the federal government will use the Unique Entity ID (UEI) created in SAM.gov which is a 12-character alphanumeric identifier. If your organization already registered through SAM.gov, you can view your UEI by following these steps. You will also be provided with a Commercial and Entity Program (CAGE) code.

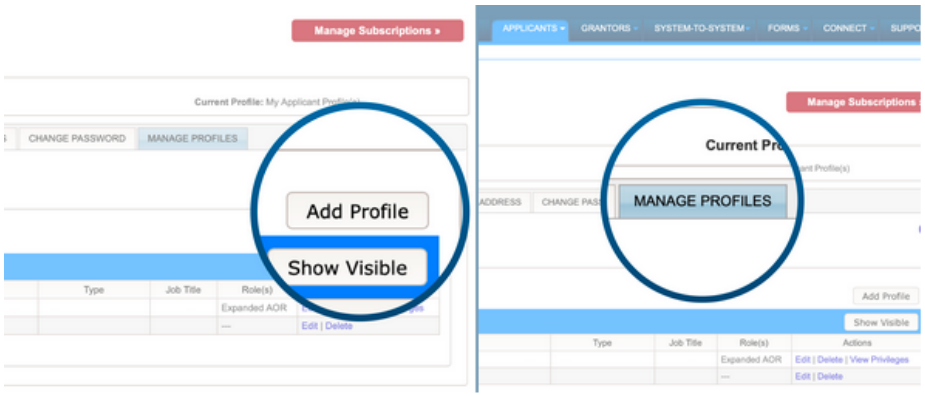
is

The registration with SAM.gov can take **several weeks to complete**, so it is important to start early.

Once you obtain the UEI and have designated a point of contact (POC), return to Grants.gov to continue registration. There your POC must:

- Create a Grants.gov account with the same email address as used in SAM.gov for EBiz POC
- Add a profile with Grants.gov using the UEI obtained from SAM.gov.

Using your existing Grants.gov account you may also apply for multiple different organizations by adding profiles with their respective UEI.



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Grant-Making Agencies

The following federal agencies award grants. Click on the agency name below to learn more about grant programs specific to each agency:

U.S. Agency for International Development (USAID) AmeriCorps (AC) U.S. Department of Agriculture (USDA) U.S. Department of Commerce (DOC) U.S. Department of Defense (DOD) U.S. Department of Education (ED) U.S. Department of Energy (DOE) U.S. Department of Health and Human Services (HHS) U.S. Department of Homeland Security (DHS) U.S. Department of Housing and Urban Development (HUD) U.S. Department of the Interior (DOI) U.S. Department of Justice (DOJ) U.S. Department of Labor (DOL) U.S. Department of State (DOS)	U.S. Department of Transportation (DOT) U.S. Department of the Treasury (TREAS) U.S. Department of Veterans Affairs (VA) Environmental Protection Agency (EPA) Institute of Museum and Library Services (IMLS) National Aeronautics and Space Administration (NASA) National Archives and Records Administration (NARA) National Endowment for the Arts (NEA) National Endowment for the Humanities (NEH) National Science Foundation (NSF) Small Business Administration (SBA) Social Security Administration (SSA)

Source: https://beta.www.sbir.gov/apply

Contracts

Contract Requirements

There are two registrations that are required for all contracting agencies - SAM.gov and SBA.gov, but you will also need to identify your NAICS code in order to bid on government proposals. The process with SAM.gov could take several weeks to complete, but the SBA.gov registration should not take more than 10 minutes. SBA requires your UEI and tax ID or EIN number to complete. Each agency requires one or more additional systems to register through - so be sure to follow up with each.

Please note: this table shows the DUNS number requirement that has since been replaced with the UEI.

REQUIRED REGISTRATION AND SUBMISSIONS

	NASA SBIR	HHS SBIR	NSF SBIR	DOE SBIR	DOD SBIR
DUNS	X	X	X	X	X
SAM	X	X	X	X	X
Company Resgistry (SBA.gov)	X	X	X	X	X
EHB [Electronic Handbook]	X				
eRA Commons		X			
Grants.gov		X		X	
NSF FastLane			X		
Portfolio Analysis and Management System (PAMS)				X	
fedconnect.net				X	
Funding Accountability and Transparency Anct Sub-award Reporting System				X	
DoD Submission Website					X

Source: https://www.sbir.gov/sites/all/themes/sbir/dawnbreaker/img/documents/Course5-Tutorial1.pdf

Next, your business will need to identify its NAICS code. These codes classify businesses based on the particular product or service they supply. The code is a Self-Assigned System. Essentially what that means is you pick the code that best suits your business and use it when asked for your code. A business will generally have a primary NAICS code, but it can also have multiple NAICS codes if it sells multiple products and services. Your primary code should be the service or product that brings in the most revenue for you company. To find your NAICS code, view the NAICS code list at the U.S. Census Bureau. Use this NAICS lookup help site to identify your code if your code isn't clear through the 2022 Manual.

Small businesses looking to contract with the U.S. Department of Defense (DoD) are required to show their Cybersecurity Maturity Model Certification (CMMC) level. The DoD has developed a platform called Project Spectrum to help businesses meet this standard.

Government Contracting Authorities

The following organizations are equipped with warranted Contracting Officers who are given authorization to execute awards and agreements on behalf of the government.

- **Air Force Research Laboratory (AFRL)** leads the discovery, development and delivery of warfighting technologies for our air, space and cyberspace forces. AFRL is pushing the boundaries and creating a new tomorrow through unparalleled research. They are using AirForceTechConnect to connect potential partners seeking to collaborate with the Air Force and Space Force science and technology (S&T) enterprise.

- The **Army Research Laboratory (ARL)** conducts foundational research in support of U.S. Army Modernization and is focused on disruptive science and technology (S&T) for the long term, performing research to answer the hardest S&T questions for future Army capabilities. This research is based on seven foundational research competencies as well as ten Essential Research Programs.

- The **Naval Research Laboratory (NRL)** provides the advanced scientific capabilities required to bolster our country's position of global naval leadership. Here, in an environment where the nation's best scientists and engineers are inspired to pursue their passion, everyone is focused on research that yields immediate and long-range applications in the defense of the United States.

- **AFWERX** serves as an entry point for industry to do business with the Air Force. Supports the mission of making the Air Force more innovative by uncovering ideas and opportunities to improve the service, connecting ideas with legitimate solutions, and transitioning tools to the warfighter. AFWERX is a catalyst for agile Air Force engagement across industry, academia, and non-traditional contributors to create transformative opportunities and foster an Air Force culture of innovation.

- **STRIKEWERX** Innovation Hub connects people and resources across government, industry, and academia to solve Air Force Global Strike Command's most challenging problems. It provides collaborative space to give traditional and non-traditional industry partners – to include small businesses, start-ups, and academia – easy access to meet with Air Force leaders and Airmen to discuss needs, gaps, and requirements.

- **Army Applications Lab**: To capitalize on opportunities for breakthrough research and development in key civil-military technology areas relevant to the Army's modernization priorities

- **Army SBIR/STTR Program**: Goal is to align innovative small businesses with critical U.S. Army priorities to turnover game-changing solutions to Soldiers.

- **Defense Advanced Research Projects Agency (DARPA)**: Primary mission is to make pivotal investments in breakthrough technologies for national security.

- **Defense Innovation Unit (DIU)**: Strengthens national security by accelerating the adoption of leading commercial technology throughout the military and growing the national security innovation base.

- **DOD Laboratories**: Engage in activities ranging from basic research through defense system acquisition support to direct operational support of deployed warfighters. These Laboratories consist of dozens of facilities across 22 states, and employs tens of thousands of scientists and engineers, both civilian and military, public employees and contractors. They conduct substantial amounts of reimbursable research and development (R&D) for DoD and Intelligence Community customer organizations.

- **DreamPort**: A combination of state-of-the-art facilities, innovative programs, and imaginative people charged with finding that spark that leads to unparalleled capability for USCYBERCOM and the warfighters at large.

- **National Security Innovation Capital (NSIC):** A new DoD initiative that enables dual-use hardware startups to advance key milestones in their product development by addressing the shortfall of private investment from trusted sources.

- **Existing Other Transaction Consortiums (OT CONSORTIUMS):** A relationship between a government sponsor and a collection of traditional and non-traditional vendors, non-profit organizations, and academia aligned to a technology domain area (i.e., cyber, space, undersea, propulsion) that are managed by a single entity, and focused on innovative solutions to government technology challenges that meet the intended scope and purpose of other transactions.

- **RIF:** Transitions innovative technologies into fielded operational capability or defense acquisition program

Technology Readiness Levels

Technology Readiness Levels (TRL) are a type of measurement system used to assess the maturity level of a particular technology. Each technology project is evaluated against the parameters for each technology level and is then assigned a TRL rating based on the project's progress.

TRL	Definition	Description	Supporting Information
1	Basic principles observed and reported.	Lowest level of technology readiness. Scientific research begins to be translated into applied research and development (R&D). Examples might include paper studies of a technology's basic properties.	Published research that identifies the principles that underlie this technology. References to who, where, when.
2	Technology concept and/or application formulated.	Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative, and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies.	Publications or other references that out-line the application being considered and that provide analysis to support the concept.
3	Analytical and experimental critical function and/or characteristic proof of concept.	Active R&D is initiated. This includes analytical studies and laboratory studies to physically validate the analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.	Results of laboratory tests performed to measure parameters of interest and comparison to analytical predictions for critical subsystems. References to who, where, and when these tests and comparisons were performed.
4	Component and/or breadboard validation in a laboratory environment.	Basic technological components are integrated to establish that they will work together. This is relatively "low fidelity" compared with the eventual system. Examples include integration of "ad hoc" hardware in the laboratory.	System concepts that have been considered and results from testing laboratory-scale breadboard(s). References to who did this work and when. Provide an estimate of how breadboard hardware and test results differ from the expected system goals.
5	Component and/or breadboard validation in a relevant environment.	Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so they can be tested in a simulated environment. Examples include "high-fidelity" laboratory integration of components.	Results from testing laboratory breadboard system are integrated with other supporting elements in a simulated operational environment. How does the "relevant environment" differ from the expected operational environment? How do the test results compare with expectations? What problems, if any, were encountered? Was the breadboard system refined to more nearly match the expected system goals?

6	System/sub-system model or prototype demonstration in a relevant environment.	Representative model or prototype system, which is well beyond that of TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high-fidelity laboratory environment or in a simulated operational environment.	Results from laboratory testing of a prototype system that is near the desired con-figuration in terms of performance, weight, and volume. How did the test environment differ from the operational environment? Who performed the tests? How did the test compare with expectations? What problems, if any, were encountered? What are/were the plans, options, or actions to resolve problems before moving to the next level?
7	System prototype demonstration in an operational environment.	Prototype near or at planned operational system. Represents a major step up from TRL 6 by requiring demonstration of an actual system prototype in an operational environment (e.g., in an air-craft, in a vehicle, or in space).	Results from testing a prototype system in an operational environment. Who performed the tests? How did the test compare with expectations? What problems, if any, were encountered? What are/were the plans, options, or actions to resolve problems before moving to the next level?
8	Actual system completed and qualified through test and demonstration.	Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation (DT&E) of the system in its intended weapon system to deter-mine if it meets design specifications.	Results of testing the system in its final configuration under the expected range of environmental conditions in which it will be expected to operate. Assessment of whether it will meet its operational requirements. What problems, if any, were encountered? What are/were the plans, options, or actions to resolve problems before finalizing the design?
9	Actual system proven through successful mission operations.	Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation (OT&E). Examples include using the system under operational mission conditions.	OT&E reports.

Source: https://www.navysbir.com/TRL-Definitions.htm

SBIR & STTR

SBIR · STTR
America's Seed Fund

Small Business Innovation Research & Small Business Technology Transfer Programs

The SBIR and STTR programs, also known as America's Seed Fund, are one of the largest sources of early-stage capital for technology commercialization in the United States. These programs allow US-owned and operated small businesses to engage in federal research and development that has a strong potential for commercialization.

Source: sbir.gov

Inland Empire Tech Bridge

Home to the U.S. Navy, Marine Corps, Army and AirForce Installations, the Inland Empire is the geographic center of the largest concentration of military power in the world. And our Tech Bridge located in **Norco, CA**, is perfectly positioned to help active the region for innovation.

Connect On LinkedIn

How We Work?

Anchored by **Naval Surface Warfare Center, Corona Division** (NSWC Corona), the Inland Empire Tech Bridge sits among a growing innovation ecosystem, NSWC Corona's strategic partnerships with academia, government, and industry support the command's mission set of performance and readiness assessment, measurement science and calibration, and rage systems engineering for Live, Virtual and Constructive (LVC) trainings.

The Inland Empire Tech Bridge also uses off-base facilities for collaborative workshops and problem-solving events to pursue dual-use innovation that benefits Sailors and Marines as well as industry.

Focus Areas

We are uniting industry and Naval resources on technology solutions in the key areas.

- Data Analytics and Visualization
- Networked Data Environments
- Measurement Technology

Inland Empire Local Resources

INLAND EMPIRE APEX ACCELERATOR

Inland Empire APEX Accelerator helps businesses identify, compete for and win government contracts. Free assistance comes in the forms of teaching, mentoring and coaching. The Inland Empire APEX Accelerator is funded in part through a cooperative agreement with the Department of Defense. We also provide our clients with the complete set of tools to research and identify government contracting opportunities. Through our services, Riverside and San Bernardino County businesses learn how to:

- Conduct market research, find government opportunities, and establish relationships with agencies
- Execute SAM and other government vendor registrations.
- Read and understand government bid and proposal solicitations
- Assist Local businesses-large and small- to form mentor/partnering agreements between firms
- Review a bid or proposal
- Locate technical information and pricing data

AMERICA'S SBDC CALIFORNIA
ORANGE COUNTY INLAND EMPIRE NETWORK

Orange County Inland Empire Small Business Development Center Network

America's SBDC California helps businesses with:

- **Business Consulting:** Meet 1-on-1 with our specialized consultants for your business planning, marketing, funding and management business needs.

- **Training:** SBDC provides business workshops and training programs for current and aspiring business owners to start and grow their businesses at little or no cost.

- **Local Grants & Loans**: Local cities are offering loan and grant programs to help businesses experiencing financial losses from COVID-19 in partnership with the SBDC.

- **SBDC Tech:** We assist high tech, high growth and scalable businesses looking to start their new tech venture, obtain angel/venture capital or SBIR/STTR assistance.

University of California, Riverside SBIR STTR

SBIR/STTR Resource Centers will help you:

- Locate agencies offering SBIR/STTR funding with focus on your innovation.
- Understand the SBIR/STTR programs and requirements.
- Connect and communicate with the agency's program manager.
- Review and improve proposal drafts.
- Produce a viable commercialization plan.
- Find resources for your company.

Overall Steps

Agencies Post Solicitations

- Before you apply, read the entire solicitation carefully. This may prevent administrative mistakes that could disqualify your proposal.
- Make sure you meet all eligibility requirements before you apply.
- Give yourself plenty of time to prepare your proposal. You must respond before the submission closing date.

Submit a Proposal

- Apply through the agency's SBIR or STTR program before the submission closing date.

Participating Agencies Review Proposals

- Review process times vary; check with the specific agency.
- The program's rigorous proposal review process provides critical feedback that can help refine your concept.

Agencies Award Funding

- If you receive funding, be strategic about how you use it, as the award amount may not cover all of your R&D expenses.
- Previous awardees may apply for Phase I funding for new innovations and Phase II funding for continuing R&D.

Steps Before Applying

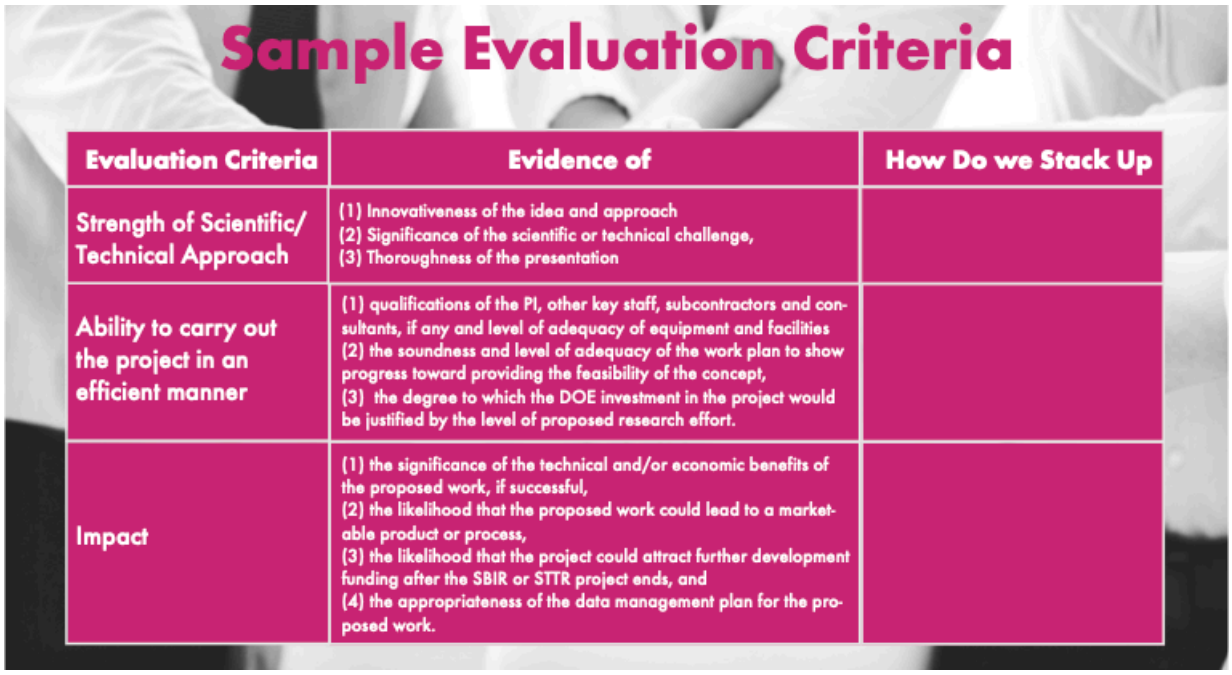
- Confirm eligibility
- Check relevant topics
    - DoD SBIR/STTR, DOE SBIR/STTR, DOT SBIR/STTR, HHS SBIR/STTR, NASA SBIR/STTR
    - Once you know you're eligible, search for currently open, future-open, and closed topics to see calls for proposals. Use keywords to search for relevant topics that might apply to your business.
        - Learn about each agency and review their previous years solicitations so you can get an idea of where they have funded in your area.
    - If you do not see a perfect fit then try finding an agency or two that are close and keep an eye on future solicitations they post.
- Complete various registrations
- Check your agency's instructions to see if you have any other preliminary steps before moving on to the proposal.
- Name a lead researcher or principal investigator (PI). They must:
    - Be primarily employed with the small business
    - Have the skills, knowledge, and resources to conduct the proposed research
    - Be available to perform the research throughout the project period
    - Legally reside in the U.S.
- Understand the proposal evaluation criteria
    - Be sure to do preliminary research to see if you're a viable candidate because each agency publishes its own eligibility criteria. Each agency has its own portal.
    - Take note of the following:
        - Amendments
        - Notices
        - Specific requirements
        - Points of contact
        - Submissions timeline

Before writing your proposal, begin by learning about the 3 criteria that must be met and better understand how each will be evaluated.

Each agency has different requirements – but all will require the following data points:

Innovation	Experience, Qualifications & Facilities	Commercialization
How does your proposal stand out from the state of the art in your field?	What qualifies your team to carry out this project? Beyond knowing you can carry out this project, demonstrate that you CAN carry it out.	What is the pain point or market opportunity your project addresses?

Charting all the criteria and providing evidence as to how you meet each one can help ensure your proposal checks all of the boxes:



Sample Evaluation Criteria

Evaluation Criteria	Evidence of	How Do we Stack Up
Strength of Scientific/ Technical Approach	(1) Innovativeness of the idea and approach (2) Significance of the scientific or technical challenge, (3) Thoroughness of the presentation	
Ability to carry out the project in an efficient manner	(1) qualifications of the PI, other key staff, subcontractors and consultants, if any and level of adequacy of equipment and facilities (2) the soundness and level of adequacy of the work plan to show progress toward providing the feasibility of the concept, (3) the degree to which the DOE investment in the project would be justified by the level of proposed research effort.	
Impact	(1) the significance of the technical and/or economic benefits of the proposed work, if successful, (2) the likelihood that the proposed work could lead to a marketable product or process, (3) the likelihood that the project could attract further development funding after the SBIR or STTR project ends, and (4) the appropriateness of the data management plan for the proposed work.	

Source:https://www.sbir.gov/sites/all/themes/sbir/dawnbreaker/img/documents/Course6-Tutorial1.pdf

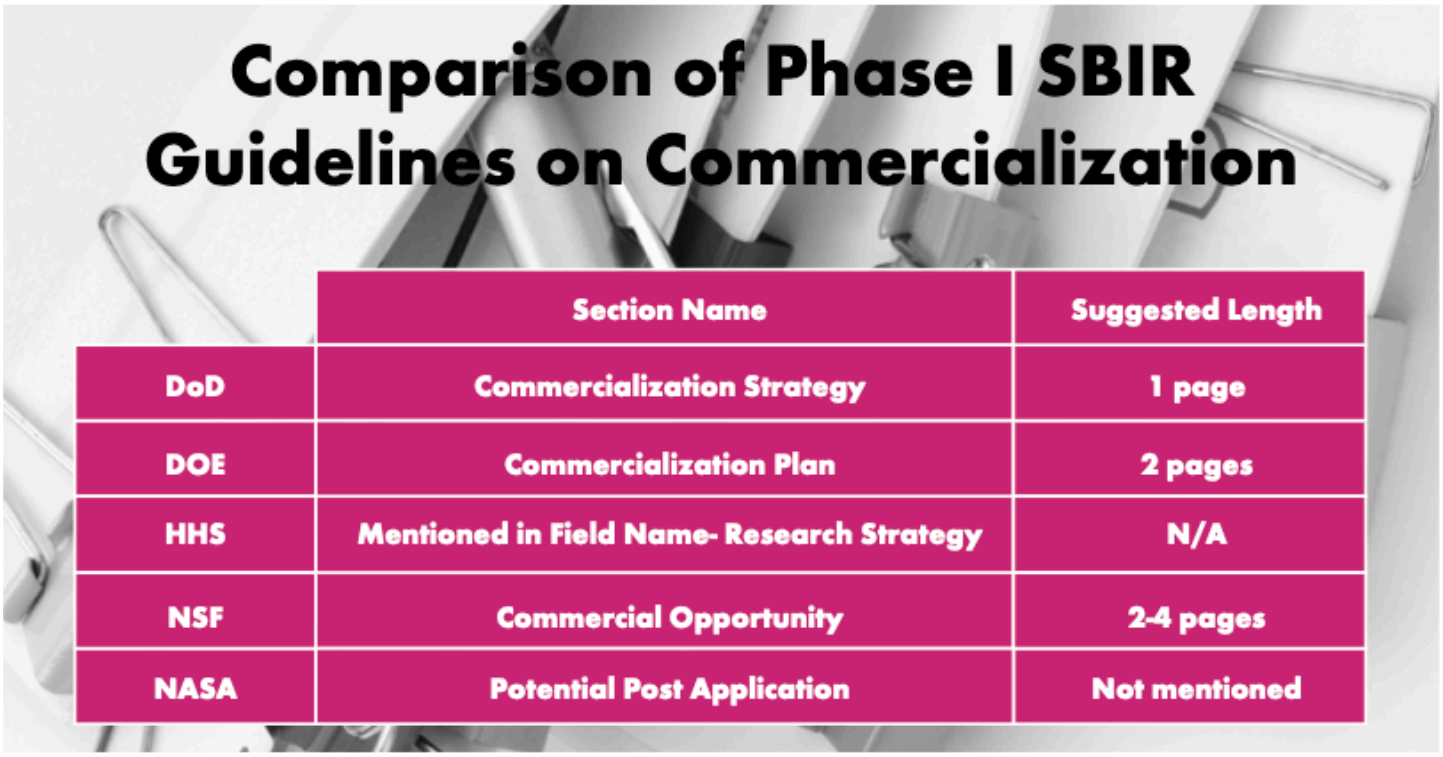
Writing your proposal

Carefully read the solicitation or Funding Opportunity Announcement (FOA) from the agency themselves, since every project has specific instructions and criteria.

You will find a sample proposal preparation instructions and requirements here.

- Various agency instructions on *Phase I* applications:
  - DOE
  - DoD
  - NASA
  - NSF
  - USDA

It is vital to your proposal to show the commercialization plans for your innovation. This tutorial goes into detail what each agency is looking for in this section.



	Section Name	Suggested Length
DoD	Commercialization Strategy	1 page
DOE	Commercialization Plan	2 pages
HHS	Mentioned in Field Name- Research Strategy	N/A
NSF	Commercial Opportunity	2-4 pages
NASA	Potential Post Application	Not mentioned

Source: https://www.sbir.gov/sites/all/themes/sbir/dawnbreaker/img/documents/Course6-Tutorial6.pdf

Helpful Tips

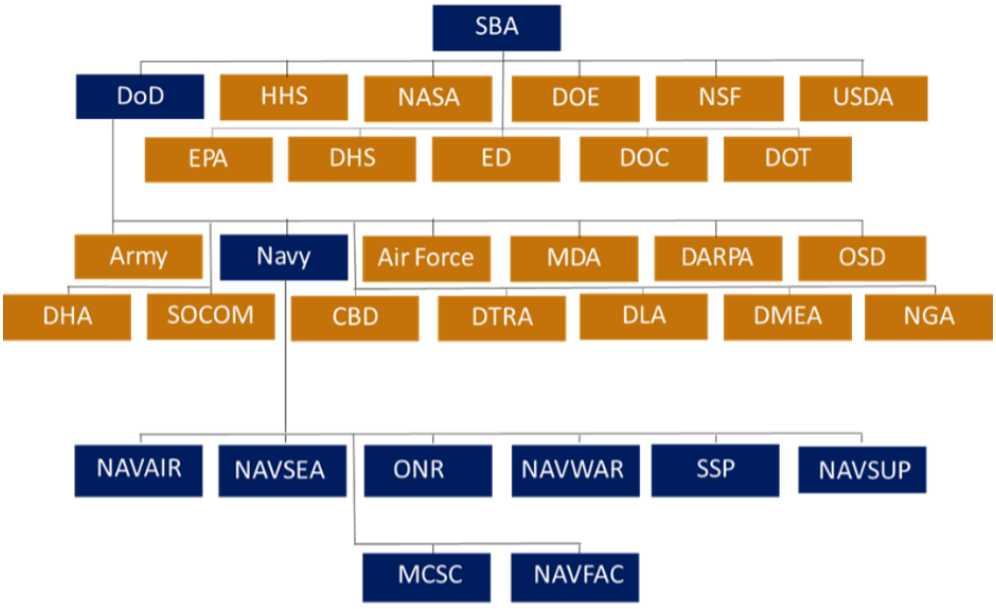
- Complete registrations early. The registration process with SAM.gov takes several weeks to complete.
- Your business profile through SAM is like a resumé - accurate and appealing descriptions are important to winning a government contract.
- You will need your ID/passwords, tax ID, EIN, MPIN and UEI at various times.
- Record the information provided, as you will need them along the way.
- Check the current status of your CAGE code here.
- Register for a CAGE code here.
- Once you submit your Entity Registration for processing, SAM will send your entity information to the DLA for CAGE Code assignment. Once the DLA assigns the CAGE Code, SAM will receive and apply the code to the Entity Registration.
- Each agency will require one or more registrations, please note this has not been updated to reflect the new UEI registration.

Navy SBIR/STTR Program Overview

Navigating the Navy SBIR/STTR Program: Overview, Funding, and Commercialization Strategies on behalf of the NAVSEA SBIR/STTR Program Office

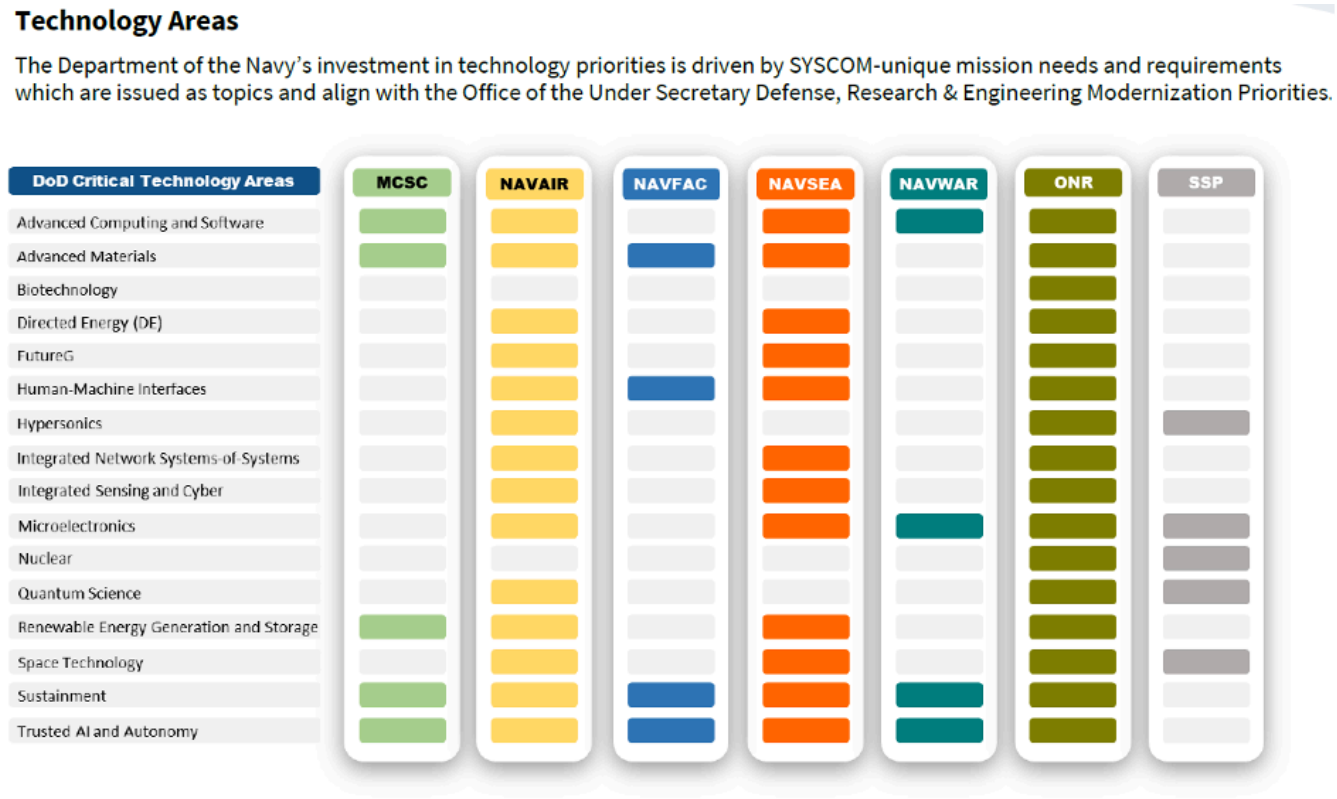
To date, the Navy has funded over $11 billion to commercialize SBIR/STTR technologies. The Navy accounts for 50% of DoD Phase III transition.

Within the Department of Navy (DoN), there are 8 System Commands (SYSCOMS) who actively participate in SBIR/STTR. Each SYSCOM has different research and development needs.



The DoN's investment in technology priorities is driven by SYSCOM-unique mission needs and requirements which are issued as topics. The structure of the SBIR program allows for small businesses to compete and produce technology specifically designed for the Program Executive Offices (PEOs) within each SYSCOM – each representing different focus areas.

NAVSEA has 5 PEOs plus Headquarters: Carriers, Integrated Warfare Systems, Unmanned Small



Combatants, Ships, and Submarines. Notably, the PEO Technology Managers (TMs) are responsible for topic development. **Industry cannot participate in the topic creation and submission process. Topics must be written and vetted by and through the Government.**

Broad Agency Announcements:
The Department of Defense (DoD) issues topics four times (including open topic) annually through Broad Agency Announcements (BAAs).

The DoD BAA includes:

- DoD instructions
- Agency unique instructions (not all agencies participate in each solicitation)
- SBIR/STTR topics (SYSCOM specific needs)
- Topic Author information

These topics are the entry point for submitting proposals and are available on the DoD's SBIR/STTR Innovation Portal, specifically here. This site includes complete requirements, proposal submission guidelines and instructions, solicitation schedule, Topic Q&A, etc.

Govt Interactions with Small Businesses During Navy Pre-Release and Open Periods:

- During the **Pre-Release** period, small businesses may review the topics, **ask questions directly of the Topic Authors**, and discuss proposed solutions**.**
- During the **Open** period, small businesses may only ask technical questions through the online DoD SITIS Q&A System - an anonymous electronic forum between small businesses and the Topic Authors. Be mindful that any questions submitted during the open period are posted publicly, as are the answers.
    - SITIS should not be used to ask general questions about the program, proposal submission requirements, or the BAA. Questions as such should be directed via e-mail form to the DoD Help Desk.
- Once the BAA **Closes**, small businesses can no longer submit proposals and proposal evaluations begin.

Conventional vs. Open Topic:
Starting in FY24, an open topic is conducted each fiscal year. A conventional topic seeks non-commercial solutions to address specific Navy needs, while an open topic looks for already commercialized solutions that can be tailored to meet Navy requirements.

Navy Programs/Resources to assist with Commercialization:
Technical and Business Assistance (TABA)
The Technical and Business Assistance (TABA) program offers support to small businesses participating in the SBIR and STTR programs to help commercialize their technologies. Participants can utilize TABA funding for various services, including assistance with product sales, intellectual property protection, market research and validation, and the development of regulatory and manufacturing plans.

Funding Details:
- Phase I: Participants can receive up to $6,500 in addition to their award.
- Phase II: Participants can receive up to $50,000 or choose to participate in the SBIR Transition Program (STP).

Important Considerations:
- TABA must be requested in the initial proposals for both Phase I and Phase II.
- Receiving TABA funding in a Phase II contract disqualifies the awardee from participating in the SBIR/STTR Transition Program (STP) and any other assistance provided directly by the DoN.

SBIR/STTR Transition Program (STP)
Navy STP participating small businesses achieve a 68 percent greater likelihood of transitioning their technology than those that do not participate.
The SBIR/STTR Transition Program (STP) is designed for small businesses with active Phase II contracts, offering free marketing resources to support their marketing ventures. This 11-month Navy-specific program provides comprehensive services to aid in the transition of technologies, focusing on business mentoring, education, and networking.

Services Provided:

- Business Mentoring: Guidance on developing and nurturing relationships with government entities and prime contractors.
- Market Research: Conducting market research tailored to transition targets and identifying potential leads for transition opportunities.
- Virtual Transition Marketplace (VTM): Showcasing technologies on the VTM, an online, searchable platform accessible to both government and private sector entities.
- Conference Exhibitions: Promoting technologies at major conferences such as Sea Air Space and West, providing opportunities for greater visibility and networking.

Department of Navy SBIR Experimental Cell (DoN-SEC)

Testing and qualifications are crucial for transitioning technology to the fleet, requiring thorough data collection and planning. This is particularly relevant during the Phase II prototype and testing stages. The DoN's SBIR Experimentation Cell (DoN-SEC) plays a key role in this process by connecting SBIR innovators with the DoN experimentation community to deliver innovative solutions for the warfighter. The SEC offers comprehensive support, including end-to-end experimentation **facilitation**, **mentoring, and training.** They also collaborate with various events to showcase technology, such as JIFX, Coastal Trident ANTX, and Trident Warrior, among others.

Methods of Support:

- Guidebook:
  - The 101 Basics of Experimentation: A guide tailored for the SBIR community, providing foundational knowledge on experimentation.
- Facilitation:
  - Lowering the threshold for entry and participation in experimentation communities, making it easier for innovators to get involved.
- Mentoring:
  - Developing relationships to enhance knowledge and awareness within the SBIR community.
- Training:
  - Providing targeted training for government sponsors and venue owners to ensure effective experimentation and technology demonstration.

Navy Launch Program

NAVY Launch is an annual 10-month program offered to Navy Phase II awardees to create opportunity and growth beyond traditional defense markets, extending reach into commercial markets. Paid for by the Department of the Navy SBIR/STTR Programs office; awardees must NOT have elected to receive Technical and Business Assistance (TABA) in Phase II to participate in the program.

Offered in partnership with H4XLabs, NAVY Launch provides awardees with:

- Commercialization foundations with a focus on truly commercial markets
- Intensive mentorship and coaching from experienced entrepreneurs and investors to help refine their business models and go-to-market strategies
- Networking opportunities to connect with potential customers, partners, and investors within the H4XLabs network and the broader dual-use technology community.

Programming is provided through a two-stage process:

- Stage 1 - Workshops focused on commercialization
- Stage 2 - Focused 1:1 company-specific mentoring and advising

Phase I Evaluation and Selection:

The Technical Volume (Volume 2) will undergo a compliance review (prior to evaluation) to verify the proposing small business concern has met the following requirements or the proposal will be REJECTED:

- Not to exceed ten (10) pages, regardless of page content
- Single column format, single-spaced typed lines
- Standard 8 ½" x 11" paper
- Page margins one inch on all sides. A header and footer may be included in the one-inch margin.
- No font size smaller than 10-point, except as permitted in the instructions above.
- Include, within the 10-page limit of Volume 2, an Option that furthers the effort in preparation for Phase II and will bridge the funding gap between the end of Phase I and the start of Phase II. Tasks for both the Phase I Base and the Phase I Option must be clearly identified.
- Work proposed for the Phase I Base must be exactly six (6) months.
- Work proposed for the Phase I Option must be exactly six (6) months.
- It is highly recommended that proposing small business concerns use the Phase I proposal template, specific to DON topics, found here, to meet Phase I Technical Volume (Volume 2) requirements.
- A font size smaller than 10-point is allowable for headers, footers, imbedded tables, figures, images, or graphics that include text. However, proposing small business

Tips for Preparing Phase I Proposal:

The DoN will evaluate and select Phase I proposals using the evaluation criteria specified in the Phase I Proposal Evaluation Criteria section of the DoD SBIR/STTR Program BAA, with **technical merit** being most important, followed by qualifications of **key personnel** and **commercialization potential** of equal importance. Here are some key points to consider for Phase I submission:

Technical Merit

· Clearly define your business's technological focus area. This will serve as your guiding tool. Remember, even if a topic is outside your usual scope, you may still be capable of developing innovative technology.

- Ensure that the proposed technology is innovative. The DoN is not looking for commercial off-the-shelf (COTS) solutions.
- Take advantage of the pre-release period to address technical inquiries with the Topic Author. Understanding your customer's needs is crucial.
- Identify any potential technical barriers. What challenges or problems do you foresee, and how do you plan to address them?
- Ensure that the proposed solution can be completed within the timeline and budget constraints of the SBIR/STTR program.
- Read the instructions carefully, as requirements may vary between agencies. Proofread your proposal thoroughly to eliminate grammar and spelling errors. Clearly articulate the technology you intend to develop.
- Keep the end goal in mind. To increase your likelihood of a successful transition, consider the following:
    - Engage with the program office early in the SBIR process to discuss future funding plans.
    - Maintain continuous communication with your TPOC and program office to ensure alignment with their priorities.
    - Determine if the technology will require additional funding beyond the SBIR program to fully mature or stabilize.

Personnel Qualifications

Only United States small businesses are eligible to participate in the SBIR/STTR programs. A small business must meet the eligibility requirements set forth in 13 CFR 121.702 "What size and eligibility standards are applicable to the SBIR and STTR programs?" at the time of Phase I and II awards, which specify the following criteria

- Organized for profit, with a place of business located in the United States
- More than 50% owned and controlled by one or more individuals who are citizens or permanent resident aliens of the United States, or by other small business concerns that are each more than 50% owned and controlled by one or more individuals who are citizens or permanent resident aliens of the United States; and
- No more than 500 employees, including affiliates

For SBIR awards from agencies using the authority under 15 U.S.C. 638(dd)(1), an awardee may be owned and controlled by more than one VC, hedge fund, or private equity firm so long as no one such firm owns a majority of the stock.

Phase I awardees with multiple prior awards must meet the benchmark requirements for progress toward commercialization.

For STTR, the partnering nonprofit research institution must also meet certain eligibility criteria:

- Located in the US
- Meet one of three definitions:
    - Nonprofit college or university
    - Domestic nonprofit research organization
    - Federally funded R&D center (FFRDC)

STTR differs from SBIR in three important aspects:

1. The small business awardee and its partnering institution are required to establish an intellectual property agreement detailing the allocation of intellectual property rights and rights to carry out follow-on research, development, or commercialization activities.
2. STTR requires that the small business perform at least 40% of the R&D and a single partnering research institution perform at least 30% of the R&D.
3. The STTR program allows the Principal Investigator to be primarily employed by the partnering research institution.

Commercialization Plan

The DoD provides an overview of solicitation guidelines for Phase I in a document referred to as the DoD Instructions or Preface. When working with DoD it's important to remember that each component that participates in a solicitation may have additional guidance for their component – so you will need to look not only at the DoD Instructions, but also at those provided by the Component. In general, the proposer is asked to include a section called Commercialization Strategy that is approximately 1 page in length in their Technical Proposal. The guidance to proposers is to:

> "Describe…. your company's strategy for commercializing this technology in DoD, other Federal Agencies, and/or private sector markets. Provide specific information on the market need the technology will address and the size of the market. Also include a schedule showing the quantitative commercialization results from this SBIR project that your company expects to achieve."

Navy Catapult Program

Catapult leverages prior SBIR investment to accelerate technology development to meet Naval priorities with a 2nd Phase II award. Eligible small business concerns and projects may be nominated by a Naval customer at any time and are approved based on priority of Naval need, availability of SBIR funding, and potential of additional non-SBIR funding.

Advantages:

- Schedule flexibility to support transition target
- Contracting mechanisms tailored to meet technical requirements
- Potential of additional non-SBIR funding to amplify impact

- Transition end-point with support from Sponsoring organization

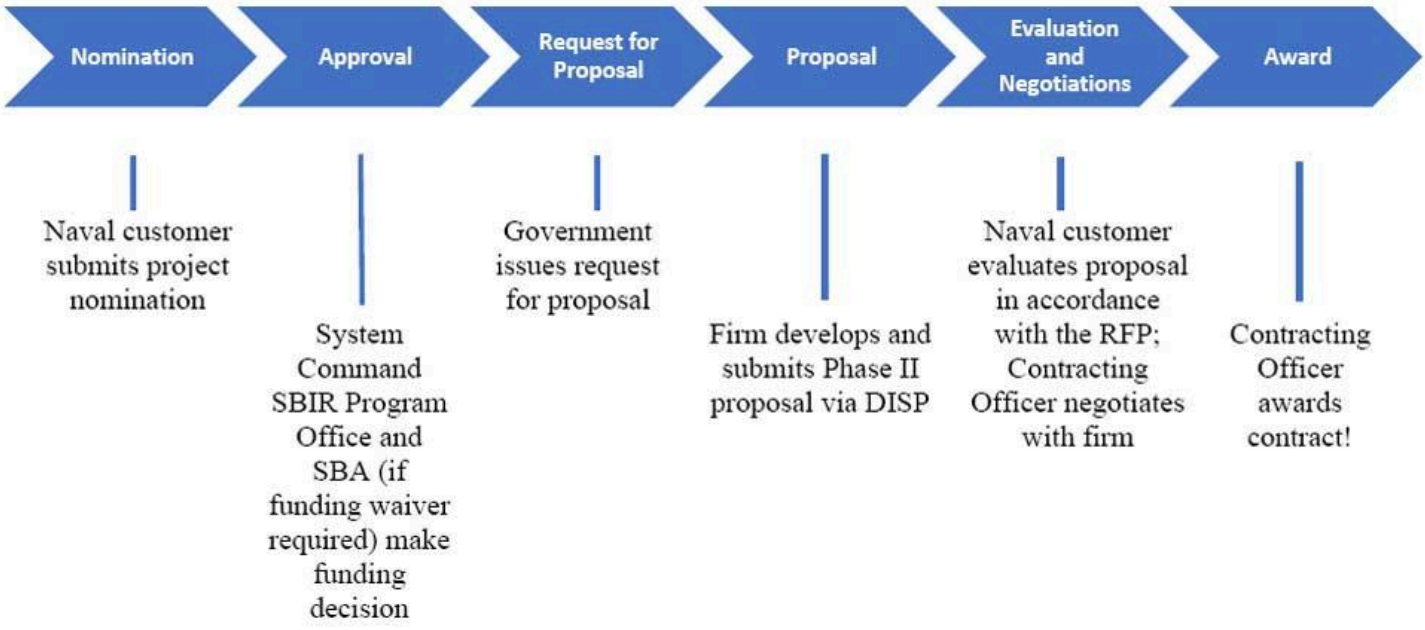
FY23 Active Portfolio:

- ~$280M invested across 176 projects
- 30% leverage cross-Agency investment
- $48M in matching non-SBIR funding

Catapult moves at the speed of the Naval customer - no annual "call" for proposals - the Naval customer drives the process.

Experience the benefits of partnering with the Marine Corps and the Navy. Get started today!

Process at a Glance



Determine Eligibility

Small business concerns that meet small business size, affiliation rules, and ownership or investment disclosure and registration requirements for the SBIR and STTR programs, are eligible for consideration.

For SBIR only, the Department of the Navy (DON) allows participation by small business concerns owned in majority part by multiple Venture Capital Operating Companies (VCOC), hedge funds (HF), or private equity firms (PEF).

All project nominations must:

- Be nominated by a Naval customer (sponsor)
- Continue and/or complete the work performed under a prior SBIR funding agreement
- Be eligible for a second Phase II award

Identify a Partner

Naval SBIR awardees are aligned to a customer at time of award and may be nominated to continue and/or complete R&D through Catapult. Current and prior Naval awardees should work directly with their customers to determine if Catapult is an appropriate next step to transition.

Catapult also accepts project nominations from the *entire DoD and Federal SBIR portfolio*. Naval customers may work directly with cross-Agency awardees on a nomination package and cross-Agency awardees should seek opportunities to market SBIR-developed technologies to Naval customers.

Nominate a Project

Catapult moves at the speed of the Naval customer. Project nominations are submitted by Naval customers and must comply with System Command (SYSCOM) SBIR Program Office nomination requirements. SYSCOM SBIR Program Office points of contact are listed at navysbir.com/poc.htm. Nominations are reviewed on an ongoing basis and approved based on:

1. Eligibility of nominee and proposed project
2. Priority of the Naval need and potential for transition
3. Availability of SBIR funding
4. Potential of additional non-SBIR funding

Help Desks

- APEX Accelerators
    - Primarily DoD Funded Program to support businesses pursuing selling goods and services to government entities.
- CAGE Commercial And Government Entity Program Assistance
    - 1-877-352-2255
- SAM Assistance
    - 1-866-606-8220
- SBA Registration Help
- SBIR Tutorials
- Small Business Development Centers
    - Primarily SBA funded Program to support business start-ups and expansion.
- Veterans Business Outreach Centers
    - Primarily SBA funded Program to support business start-ups and expansion, primarily focused on veteran business owners and entrepreneurs.
- Women's Business Centers
    - Primarily SBA funded Program to support business start-ups and expansion, primarily focused on women owned businesses and female entrepreneurs.

If you have any questions, don't hesitate to contact our team so we can help you succeed:

kristine@future-laboratories.org

Appendix/Acronym Finder

- **AFWERX:** Innovation program managed by the Air Force Research Laboratory
- **AFRL:** Air Force Research Lab
- **Commercial and Government Entity Program (CAGE):** CAGE code is a five-character alpha-numeric identifier assigned to entities located in the United States and its territories. The DLA CAGE Program Office is the only activity authorized for assignment or update of a CAGE code.
- **Commercial Test Agreement (CTA):** Offers access to the Air Force's large number of unique resources, such as its "best and brightest" scientists and engineers, and unique, world-class Air Force laboratories and test facilities. Expertise is also available in the full spectrum of related aerospace technologies as well as manufacturing and design services, structural analysis and modeling support for testing.
- **Consortiums:** An organized group that consists of members in the form of nonprofits, academic institutions, or contractors focusing on a specific technology area.
- **Cooperative Research and Development Agreement (CRADA):** These are a formal written agreement between one or more Federal laboratories and one or more non-Federal parties. The purpose of a CRADA is to make available Government facilities, intellectual property, and expertise for collaborative interactions that lead to useful, marketable products that benefit public health.
- **DEFENSEWERX:** A designated 501(c)(3) organization that helps link an international network of public agencies, businesses, academia and individuals to enable the development of innovative platforms.
- **Educational Partnership Agreement (EPA)**: A formal agreement between a defense laboratory and an educational institution to transfer and/or enhance technology applications and to provide technology assistance for all levels of education (pre-kindergarten and up).
- **Federal Laboratory Consortium (FLC):** The FLC is a nationwide network of more than 300 federal labs, facilities and research centers, providing strategies and opportunities for accelerating federal technologies out of the labs and into the marketplace.
    - They have implemented multiple engagement opportunities that support partnerships in multiple ways. They include:
        - Helping federal labs **showcase the technologies, facilities and expertise** they offer that can accelerate the growth and success of businesses and other non-federal partners.
        - Helping non-federal organizations **navigate the FLC's network** of more than 300 federal labs to identify the best match for a collaborative venture.
- **IP:** Intellectual Property

- NavalX: NavalX serves the Navy and Marine Corps as an innovation and agility cell, supporting and connecting initiatives across the Department of Defense. We connect teams with tools, training, and resources—enabling people to think differently and deliver more effective solutions to the warfighter.Office of Research and Technology Applications
- **ORTA:** guided by the White House Cross Agency Priority Goal: Lab to Market. The focus of this goal is to increase the economic impact of federally –funded research and development by accelerating and improving the transfer of technologies from the laboratory to the commercial marketplace.
- **Patent License Agreement:** A patent license agreement is a contract between a patent owner (licensor) and a licensee that defines the terms under which the licensee may make, sell, and use a patented invention.
- **PI:** Principal Investigator
- **Procurement Technical Assistance Center (PTAC):** Consultants provide businesses one-on-one technical assistance, information and training in qualifying to be able to bid on federal, state, and local government contracts at no cost.
- **SAF/AQ:** Undersecretary of the Air Force for Acquisitions.
- **SBIR TT:** Combining technology transfer partnering mechanisms with SBIR funding to move inventions from bench research to market.
- **Small Business Administration**
- **Small Business Advocates**
- **Small Business Technology Transfer Grants (STTR):** These grants are offered by the Small Business Administration to help small businesses to develop, refine, and commercialize technologies. The grant provides funding for up to 75% of the costs. The STTR program aims to foster technology transfer through cooperative R&D between small businesses and research institutions. It exists to unlock the power and innovative thinking of the country's research institutions. The primary difference from SBIR is that for STTR, the small business must formally partner with a research institution.
- **SpaceWERX:** innovation arm of the U.S. Space Force and a part of AFWERX, powered by the Air Force Research Laboratory.
- **Strategic Funding Increase (STRATFI)/Tactical Funding Increase (TACTFI)**
- **SPO:** System Program Office
- **SAM:** System for Award Management
- **Tech Bridges:** A connected network that enhances collaboration between Naval Labs, industry, academia, and other military branches. They offer a collaboration space in a commercial business space, rather than on base. An off base location offers a more easily accessible landing spot to foster a collaboration ecosystem to build productive partnerships and accelerate delivery of dual use solutions to the warfighter.
- **Technology Transfer and Transition:** Created to ensure all Air Force science and engineering activities promote the transfer or exchange of technology with state and local governments, academia, and industry.